



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,118	01/31/2001	Peter M. Maddocks	10004943-1	5383

7590

02/02/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

KANG, INSUN

ART UNIT	PAPER NUMBER
----------	--------------

2124

DATE MAILED: 02/02/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,118

Applicant(s)

MADDOCKS ET AL.

Examiner

Insun Kang

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/31/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-30 are pending.

#### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the abstract contains a phrase "The invention comprises" in line 4. Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under

Art Unit: 2124

the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-8, 10, 11, 14-16, 18-20, 22-24, 26-28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Weinberg et al. (US Patent 6,587,969), hereinafter referred to as "Weinberg."

As per claim 1:

Weinberg discloses *an apparatus for providing a graphical user interface (GUI) comprising: logic configured to execute GUI generation code and GUI user interaction handling code; and a display device in communication with said logic* ("Each node in the tree is generated when a GUI structure is passed to or from the transactional server. The nodes are added to the tree and...displayed as the recording proceeds," col 21, lines 35-65; "One inventive feature of the testing tool involves displaying the test to the user as a hierarchical node structure, such as a tree, in which steps of the test are represented as corresponding nodes. Preferably, each node is displayed as an icon that indicates the type of the step, together with a textual step name or annotation. To edit the test, the user can select a node from the node structure to view and edit the node's properties," col 2, lines 40-56); *wherein when said logic executes the GUI generation code, a first window is displayed on the display device, said first window presenting at least one option that enables a user to open a file comprising machine control sequence execution results resulting from execution of a machine control sequence* (see the Execution Log in table 1 (col 8); "As the testscript lines are

Art Unit: 2124

executed, the screens returned by the transactional servers are preferably stored for subsequent viewing, and the execution results (e.g., results of verification steps) are written to the execution log and the results spreadsheet, as appropriate. The test results may alternatively be buffered in memory, and written to the appropriate file(s) only after the test has completed. In one embodiment, the execution log is generated and displayed during the execution process," col 23, lines 10-38; "an execution log 69 stores additional results of the most recent test execution, and is used to generate and display the results tree," col 22, lines 15-21) and *wherein when said file is opened, a second window is displayed on said display device, said second window displaying at least a summary of said execution results comprised in said file* (See the displayed Execution Log window in Fig 3A, 4A, and 5F; "FIG. 5F illustrates the execution summary that is provided in a web-based implementation of the testing tool. The execution summary includes a tree representation ... or "report tree" of the test execution in the left pane of the screen," col 17, lines 1-45; see also col 3, lines 11-44; col 11 lines 33-50).

As per claim 2, the rejection of claim 1 is incorporated. Weinberg further discloses that *said first and second windows are displayed on the display device as active portions within a third window such that said first and second windows are simultaneously and fully viewable by a user* ("The captured screens are further represented in the tree window ... as respective icons and annotations (211 and 218 in FIG. 2). During editing of the test, the captured screens are

preferably displayed in the capture window ... in an active format which permits the user to select fields and other elements of the screens," col 11, lines 15-24; The testing tool presents these captured screens in an Active Screen.TM. format that allows the user to select objects and assign properties to objects within a screen. The Active Screen format preferably allows the user to manipulate an object on the screen (e.g., a text area) to modify properties that are associated with the object," col 12, lines 16-36).

As per claim 3, the rejection of claim 1 is incorporated. Weinberg further discloses that *said summary includes information summarizing an entire run of said machine control sequence, said run corresponding to one or more iterations of said machine control sequence* ("Each iteration of the test and the associated steps are presented as nodes of the tree 84. For example, the first test iteration is represented by a first node 81, and details of this iteration can be viewed by expanding this node 81.... The summary page includes the date/time of execution and a summary table 82. Each column in the table 82 corresponds to a screen request or a check, and each row of the table 82 corresponds to an iteration of the test," col 17, lines 1-50; see also Table 4).

As per claim 5, the rejection of claim 3 is incorporated. Weinberg further discloses that *said second window displays, in addition to said summary, detailed information describing each command executed during at least one of said iterations* ("Results of verification steps are also preferably represented

Art Unit: 2124

graphically within the report tree... If the test was executed multiple times with different data sets, each iteration is preferably represented within the report tree by a corresponding node (together with a graphical indication of pass/fail status) which can be expanded to view the details of the iteration," col 3, lines 29-44; ; see also col 17, lines 1-50; col 22, lines 22-36 and 55-67)

As per claim 6, the rejection of claim 5 is incorporated. Weinberg further discloses that *said detailed information includes a start time and an end time associated with execution of each command executed during said at least one of said iterations* (see Table 4 and 5 (execution log); "The right pane of the execution summary screen displays the report details (preferably as HTML pages) corresponding to the currently-selected node of the report tree ... When the user selects the root node of the tree a results summary page is displayed in the right pane as shown in FIG. 5F. The summary page includes the date/time of execution and a summary table 82," col 17, lines 20-33) .

As per claim 7, the rejection of claim 5 is incorporated. Weinberg further discloses that *said detailed information includes information defining the iteration associated with the displayed command* ("If the test was executed multiple times with different data sets, each iteration is preferably represented within the report tree by a corresponding node (together with a graphical indication of pass/fail status) which can be expanded to view the details of the iteration," col 3, lines 29-44; "The execution summary includes a tree representation 84 or "report tree" of

Art Unit: 2124

the test execution in the left pane of the screen. Each iteration of the test and the associated steps are presented as nodes of the tree 84. For example, the first test iteration is represented by a first node 81, and details of this iteration can be viewed by expanding this node 81," col 17, lines 1-19).

As per claim 8, the rejection of claim 5 is incorporated. Weinberg further discloses that *said detailed information includes a step associated with the displayed command* ("Each iteration of the test and the associated steps are presented as nodes of the tree 84. For example, the first test iteration is represented by a first node 81, and details of this iteration can be viewed by expanding this node 81.... The summary page includes the date/time of execution and a summary table 82. Each column in the table 82 corresponds to a screen request or a check, and each row of the table 82 corresponds to an iteration of the test," col 17, lines 1-50; see also Table 4).

As per claim 10, the rejection of claim 5 is incorporated. Weinberg further discloses that *said detailed information includes information indicating whether or not the displayed command was successfully executed* ("In one embodiment, special status icons (e.g., a caution symbol) are used to indicate that an error, such as a failed verification step, occurred at lower level of the tree," col 16, lines 60-67; "The final execution log step (step 63) associated with the illustrated verification step 55 indicates a result of the verification step, which is a "verification passed" statement in this example... every step of the execution log

Art Unit: 2124

that is successfully completed has a check mark as part of the corresponding icon. Steps that are not successfully completed have a cross mark as part of the associated icon," col 19, lines 12-31; see also col 3, lines 29-44; col 17, lines 8-45)

As per claim 11, the rejection of claim 1 is incorporated. Weinberg further discloses that *said second window displays a unique iteration number identifier for each of said one or more iterations, each said iteration number identifiers uniquely identifying a particular iteration of said machine control sequence, and wherein when a user selects one of said unique iteration number identifiers, detailed information describing each command executed during the iteration associated with the selected iteration number identifier is displayed on said display device* ("After the first iteration, the breaker with an iteration number that is one less than the number of the current iteration of the test case is located before data is sent," col 24, lines 57-67 and Fig 5F ).

As per claims 14-16, 18-20 and 22, they are the method versions of claims 1-3, 5-7 and 10, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-3, 5-7 and 10 above.

As per claims 23, 24, 26-28 and 30, they are the computer program versions of claims 1, 3, 5-7 and 10, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1,3, 5-7 and 10 above.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 9, 12, 17, 21, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg et al. (US Patent 6,587,969), hereinafter referred to as "Weinberg" in view of Jibbe (US patent 6,311,320).

As per claim 4, the rejection of claim 1 is incorporated. Weinberg further discloses that the *machine control sequence has at least one step associated therewith* ("The tree window includes a hierarchical representation of the steps," col 8, lines 54-67; "Each node of the tree generally represents one "step" of the test and is represented with a corresponding icon. The type (image) of the icon provides a visual representation of the type of step," col 9, lines 8-27; "Yet another inventive feature of the testing tool involves displaying the results of test execution using a hierarchical node structure ("report tree") in which steps of the test are represented by corresponding nodes. When the user selects a node from the report tree, the testing tool automatically displays results (e.g., a returned screen, or results of a verification step) associated with the corresponding step," col 3, lines 29-44; see also col 5, lines 52-65);

However, Weinberg does not further disclose said at least one step having at least one device associated therewith, said at least one device having at least one command associated therewith.

Jibbe discloses a scripting tool for testing for computer devices for the purpose of ease of testing a variety of computer devices without knowing the scripting language and without requiring a new scripting system (col 1, lines 23-55) and of providing ease view of results of executing a script command with the script command that caused the results (col 2, lines 47-54; "the scripting tool ... stores in the log file... and displays in the status window ... certain status information resulting from execution of the test script (col 7, lines 48-67)" and col 16, lines 19-55).

Therefore, it would have been obvious to a person of ordinary skill in the art to include a list of device in steps in the method of Weinberg so that the list of devices to test can be easily added/removed from the steps and the test results can be easily viewed. The modification would be obvious because testing computer devices can be performed at a high level and analyzing the test results can be done easily.

As per claim 9, the rejection of claim 5 is incorporated. Weinberg does not further disclose said detailed information includes a device associated with the displayed command.

However, Jibbe discloses a scripting tool for testing for computer devices for the purpose of ease of testing a variety of computer devices without knowing

Art Unit: 2124

the scripting language and without requiring a new scripting system (col 1, lines 23-55) and of providing ease view of results of executing a script command with the script command that caused the results (col 2, lines 47-54; "the scripting tool ... stores in the log file... and displays in the status window ... certain status information resulting from execution of the test script (col 7, lines 48-67)" and col 16, lines 19-55).

Therefore, it would have been obvious to a person of ordinary skill in the art to include a list of device in steps in the method of Weinberg so that the list of devices to test can be easily added/removed from the steps and the test results can be easily viewed. The modification would be obvious because testing computer devices can be performed at a high level and analyzing the test results can be done easily.

As per claim 12, the rejection of claim 11 is incorporated. Weinberg further discloses that said detailed information includes: a start time and an end time associated with execution of each command that was executed during the iteration associated with the selected iteration number identifier (see Table 4 and 5 (execution log); "The right pane of the execution summary screen displays the report details (preferably as HTML pages) corresponding to the currently-selected node of the report tree ... When the user selects the root node of the tree a results summary page is displayed in the right pane as shown in FIG. 5F. The summary page includes the date/time of execution and a summary table 82,"

Art Unit: 2124

col 17, lines 20-33) ; information identifying the iteration associated with the displayed command ("Each iteration of the test and the associated steps are presented as nodes of the tree 84. For example, the first test iteration is represented by a first node 81, and details of this iteration can be viewed by expanding this node 81.... The summary page includes the date/time of execution and a summary table 82. Each column in the table 82 corresponds to a screen request or a check, and each row of the table 82 corresponds to an iteration of the test," col 17, lines 1-50; see also Table 4); a step associated with the displayed command ("Each iteration of the test and the associated steps are presented as nodes of the tree 84. For example, the first test iteration is represented by a first node 81, and details of this iteration can be viewed by expanding this node 81.... The summary page includes the date/time of execution and a summary table 82. Each column in the table 82 corresponds to a screen request or a check, and each row of the table 82 corresponds to an iteration of the test," col 17, lines 1-50; see also Table 4).

However, Weinberg does not further disclose a device associated with the displayed command.

Jibbe discloses a scripting tool for testing for computer devices for the purpose of ease of testing a variety of computer devices without knowing the scripting language and without requiring a new scripting system (col 1, lines 23-55) and of providing ease view of results of executing a script command with the script command that caused the results (col 2, lines 47-54; "the scripting tool ... stores in the log file... and displays in the status window ... certain status

Art Unit: 2124

information resulting from execution of the test script (col 7, lines 48-67)" and col 16, lines 19-55).

Therefore, it would have been obvious to a person of ordinary skill in the art to include a list of device in steps in the method of Weinberg so that the list of devices to test can be easily added/removed from the steps and the test results can be easily viewed. The modification would be obvious because testing computer devices can be performed at a high level and analyzing the test results can be done easily.

Weinberg further discloses information indicating whether or not the displayed command was successfully executed ("In one embodiment, special status icons (e.g., a caution symbol) are used to indicate that an error, such as a failed verification step, occurred at lower level of the tree," col 16, lines 60-67; "The final execution log step (step 63) associated with the illustrated verification step 55 indicates a result of the verification step, which is a "verification passed" statement in this example. As may be appreciated, every step of the execution log that is successfully completed has a check mark as part of the corresponding icon. Steps that are not successfully completed have a cross mark as part of the associated icon," col 19, lines 12-31; see also col 3, lines 29-44; col 17, lines 8-45).

As per claim 17, it is the method version of claim 4, respectively, and is rejected for the same reasons set forth in connection with the rejection of 4 above.

Art Unit: 2124

As per claim 21, it is the method version of claim 8 and 9, respectively, and is rejected for the same reasons set forth in connection with the rejection of 8 and 9 above.

As per claim 25, it is the computer program version of claim 4, respectively, and is rejected for the same reasons set forth in connection with the rejection of 4 above.

As per claim 29, it is the computer program version of claim 8 and 9, respectively, and is rejected for the same reasons set forth in connection with the rejection of 8 and 9 above.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg et al. (US Patent 6,587,969), hereinafter referred to as "Weinberg."

As per claim 13, the rejection of claim 1 is incorporated. Weinberg does not specifically disclose that the GUI generation code and the GUI user interaction handling code are written in an object-oriented, platform-independent language.

However, Official Notice is taken that it was well known that the GUI generation code and the GUI user interaction handling code are written in an object-oriented, platform-independent language such as Java at the time applicant's invention was made for the purpose of portability.

Art Unit: 2124

Therefore, it would have been obvious to a person of ordinary skill in the art to use an object-oriented, platform-independent language such as Java (Applet, Swing) to write the GUI generation code and the GUI user interaction handling code in the testing tool of Weinberg so that the tool can be portable over heterogeneous operating environments. The modification would be obvious because Weinberg's method can produce a cross-platform GUI testing tool that generates low-level execution results in an easy form to view and analyze.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 703-305-6465. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 703-305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-308-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

IK  
1/20/2004

*Kakali Chaki*  
**KAKALI CHAKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**